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**From:** Polanco, Susan  
**Sent:** Thursday, August 14, 2014 10:58 AM  
**To:** Sablad, Elizabeth  
**Subject:** EPA contact requested re: CCH HI NPDES permits - biomass requirement

Aloha Elizabeth,

I met this new person at the Hawaii Water Quality meeting on Tuesday and he would like to talk to someone about the CCH permits. I suggested that he should work with Alec and Kris but he wanted to connect with someone at EPA. May I forward your name to him or could you contact him directly or is there someone else I should put him in contact with? Please let me know.

Thank you,  
Susan

Susan Polanco de Couet  
HI SRF Project Officer

-----Original Message-----

From: Marek Kirs [<mailto:kirs@hawaii.edu>]  
Sent: Wednesday, August 13, 2014 4:45 PM  
To: Polanco, Susan  
Cc: Philip Moravcik; Roger Fujioka  
Subject: HI NPDES permits - biomass requirement

Aloha Susan,

I'm really glad we met yesterday at the UH. This is just to follow up on the conversation we had.

Our Water Resources Research Center is contracted by the City and County of Honolulu (CCH) to analyze benthic infauna samples collected around ocean outfalls, mainly to satisfy NPDES requirements. Several changes were recently introduced to the Honouliuli NPDES permit 0020877 and Sand Island permit 0020117. These permits now require biomass estimates as wet weight for several benthic microorganisms (molluscs, echinoderms, polychaets, crustaceans and other taxa) in benthic infauna samples. Our researchers directly involved in collecting and identifying organisms in those samples for the CCH are questioning this change as those measurements are difficult to complete due to the size of those organisms in Hawaii coastal samples as well as provide limited or no information on benthic ecosystem health, while taking of those measurement can actually compromise current monitoring program as needed taxonomic information can be lost during the process. There is also substantial financial burden associated with this biomass requirement.

Furthermore, when requiring those estimates, NPDES permit # 0020877 for Honouliuli WWTP refers to EPA document Recommended Biological Indices for 301(h) Monitoring Programs (EPA 430/0-86-002, 1987). Although somewhat dated and vague on actual methods, this EPA document states at page 8 that "The inclusion of biomass as required variable in 301(h) monitoring programs is not recommended for benthos and fishes, however, because of problems inherent in the collection of biomass". Several limitations are outlined at page 9. As the limitations of biomass measurements seem to be well accepted by the EPA, we are somewhat baffled why this requirement was introduced. When consulting NPDES permits associated with outfalls in State of California (e.g. NO.

CA0037681 San Francisco, CA0110604 Orange County, and others), we do not appear to find biomass requirement for benthic infauna samples.

While we have contacted Kris Poentis and Daryl Lum from the DOH to request a meeting to discuss the changes in the Honouliuli NPDES permit 0020877 and Sand Island permit 0020117, do you know who from the EPA might have information regarding the underlying reasons and scientific basis of this biomass requirement? I'm fully aware that you do not work on this area, but perhaps you are able to guide us towards the right person.

Best regards,  
Marek

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